Craig W. Rasmussen

Jordan School District
9361 S. 300 East
Sandy, UT 84070-2998
Ph: (801) 412-2343
Fax: (801) 412-2346
craig.rasmussen@jordan.k12.ut.us

About the District

- Largest of Utah's 40 districts and among 50 largest districts in the nation.
- The District has 9,000 employees.
- Located in Southern Salt Lake County with 75,000 students.
- Comprised of 86 schools in a 250 square mile area radius.
- On the Web: www.jordandistrict.org

Transportation Department

- Fleet of 269 buses, including 20 CNG
- 17 buses on order, including 10 CNG
- 102 drivers ed. cars, including 2 CNG
- 200 additional vehicles, includes 6 CNG
- Transport 21,000 students daily
- Average 5,000 annual field trips/runs
- Travel more than 4.8 million miles yearly
- Maintenance one of Top 10 in America

SUCCESSFUL CNG PROGRAM

- Requires a successful team effort, with a commitment from everyone.
- The Jordan District Team involves:
  - All levels of Administration
  - Clean Cities Coalition
  - EPA
  - Questar Corp. (fuel supplier)
  - Department of Energy
  - National Energy Foundation
  - Fuel Maker
  - John Deere
  - Suppliers, including Blue Bird, Thomas, Honda, etc.

Department Commitment

- Positive attitude from the Department Director, Route Coordinators, and Staff.
- Mechanic support and annual training from vendors, including before arrival of new buses and equipment.
- Bus driver support and training, along with students, parents and others.
- Don’t get discouraged. Keep at it with a positive attitude for improvement and success.

Transportation Department Fact Sheet

www.jordandistrict.org/depts/transportation.htm

Jordan School District Transportation Department

FACT SHEET

Transportation Employees
- 275 professional school bus drivers
- 60 professional school bus attendants
- 45 mechanics, parts, dispatchers, trainers, support staff

Fleet
- 269 school buses (20 natural gas buses)
- 102 drivers education cars
- 204 additional vehicles (3 mail vans, 2 maintenance trucks and 1 forklift run on alternative fuel -- primarily natural gas)
- 4.8 million miles traveled yearly

Students/Schools
- 84 schools Served
- 20,000 regular education students transported daily
- 1,500 special education students transported daily
- 5,000 field trips/activity trips yearly

Training/Testing
- 18 hours, all drivers receive yearly training
- 60 hours training received by substitutes before hire
- 9,157 training hours provided yearly

Did You Know?

- Ninety (90) percent of Jordan School District bus drivers were accident free last year.
- The District's bus fleet includes 20 CNG (clean natural gas) buses. Jordan School District leads the way for clean air in Utah and is the only school district in Utah operating natural gas buses.
- Students at West Jordan High School drive two CNG drivers education vehicles.
- Our drivers won the 2004 National Special Education Road-eo.
- Top Ten: Our bus maintenance program was named one of North America's best by *School Bus Fleet* in 2002.
- Winner of the 2000-01 Utah Highway Patrol Silver Award for Outstanding Bus Maintenance.
- In 2000, *School Bus Fleet* featured Jordan District as Utah's finest school bus fleet.

AFV Drivers Education Fact Sheet

www.jordandistrict.org/depts/transportation.htm

Jordan School District

Alternative Fuel Drivers Education Training

- West Jordan High in Jordan School District is likely the first high school drivers education program in the United States utilizing alternative fuel vehicles (AFVs).
- The program was made possible with the use of grant funds awarded by the U.S. Department of Energy (DOE).
- Program partners include Jordan School District, DOE, Clean Cities Program, FuelMaker, National Energy Foundation, and American Honda Motor Company.
- The program will impact approximately 700 students electing to take drivers education at West Jordan High School this year.
- Educational materials on alternative fuels are being provided to the driver's education students.
- In addition to learning the rules of the road, safety issues, and actual driving experiences, the students have the opportunity to discover how alternative fuel is being used in the transportation industry through classroom discussion and presentations by alternative fuel professionals.
- Two Honda Civic GX dedicated natural gas vehicles are being used to provide the students with an actual alternative fuel driving experience.
- A FuelMaker natural gas fueling appliance is on site for convenient fueling of the natural gas vehicles.
- Alternative fuels are abundant in the United States, generally cost less and are always cleaner burning.
- Right now a gallon of natural gas costs nearly a dollar less than a gallon of regular unleaded.
- The United States imports about 55 percent of the petroleum we need, and a majority of those imports come from the Middle East.
- If you buy an alternative fuel vehicle (AFV) you can get a state tax credit and a federal tax deduction.
- Jordan District, which the U.S. Department of Energy has deemed the "premier alternative fuel school bus fleet in Utah," has 20 buses, three mail vans, two maintenance trucks and a forklift that run on alternative fuel sources — primarily natural gas.
- Since 1992, Jordan School District has successfully operated dedicated natural gas buses and realized reduced emissions. It is the only school district in Utah that uses natural gas buses.
- The natural gas-powered Honda Civic GX has the cleanest internal combustion engine in the world.
- The natural gas vehicles used by West Jordan High get an average 32 miles per/gasoline gallon equivalent. With the existing price of natural gas, that's about .03 per mile in fuel costs.
- Alternative fueled vehicles are safe to operate.
- In addition to compressed natural gas, the other alternative fuels are propane, electric, ethanol (E-85) and biodiesel. All fuels are available in Utah.
- Both large and small fleets, as well as public and private fleets in Utah, are driving AFVs.

For more general information on AFVs, consult www.fleets.doe.gov

or for local information contact
Salt Lake Clean Cities, 535-7736, or
Jordan School District
Transportation Department, 567-8840

Activists urging schools to use alternative fuels

Deseret News

www.jordandistrict.org/depts/transportation.htm

deseretnews.com

Deseret News, Tuesday, August 19, 2003

Activists urging schools to use alternative fuels

Jordan District called 'premier' fleet in Utah

By Andrea Christensen
Deseret Morning News

The state's largest school district is well on its way to acquiring an environmentally friendly transportation fleet, and representatives from Salt Lake's Clean Cities Coalition are hoping other Utah districts will follow suit.

Jordan District, which the U.S. Department of Energy has deemed the "premier alternative fuel school bus fleet in Utah," has 19 buses, three mail vans, two maintenance trucks and a forklift that run on alternative fuel sources — primarily natural gas. The district, whose fleet travels about 3.1 million miles a year, just added two natural gas Honda Civics to those numbers. The Hondas will be used for drivers education at West Jordan high School.

Willie Martinez fills one of the 19 Jordan District buses that run on compressed natural gas.
Kim Hornak, Deseret Morning News

"Jordan has simply been enthusiastic about it," said Beverly Miller, Salt Lake's Clean Cities director. And Miller, along with other environmental aficionados, presented the case for alternative fuels at Utah school board meetings this summer in an attempt to get more people enthusiastic about the cause.

"Our primary goal is the one we state to school boards — we are interested in writing grants to help school districts get into new systems," she said. "Goal two is to simply get out there and tell school boards our story. We're just attempting to make it a little more public."

The story the coalition is bringing to the Salt Lake, Granite, Davis and Murray school boards is a story of clean air and of reliance on domestic, not foreign, fuel sources. Those sources include compressed natural gas, biodiesel (which, in Utah, is made from virgin soybean oil) and ultra-low-sulfur diesel — all of which will help buses meet new emissions standards to be implemented in 2007.

So what's not to love about these fuels, and why aren't all districts hopping on the Jordan bandwagon?

It's largely a matter of money. To buy a natural gas bus, a district can expect to spend $30,000 to $35,000 more than it would on a diesel bus. Running a bus on biodiesel requires no change to a diesel bus, but the fuel can cost 20 to 30 cents more per gallon. Even Miller recognizes that Utah's districts have "seriously tight budget constraints," but she hopes that with federal grants

Perseverance with CNG Buses

Questar's *NewsQuest*

www.jordandistrict.org/depts/transportation.htm

Utah school district gets high marks for perseverance with natural gas buses

Drivers report that newer generation of engines is virtually trouble free

Sooner or later, just about everyone who works with — or writes about — natural gas vehicles (NGVs) hears a story that goes like this:

"Natural gas vehicles! Yeah, we gave 'em a try once. We had a couple of jill in type of vehicle here! with prototype natural gas engines. The trouble was, every time we got to a hill, everyone had to get out and push. Oh, and the regulators used to freeze up if you just looked at 'em wrong.

"Would I be willing to try one again! Hey, I'm in business to make money, not be a guinea pig for every new idea that comes down the pike!"

Like most new machines, prototype natural gas engines have had their share of problems. And those problems have driven a lot of people away. So, when you find an organization with a belief in the environmental benefits of the product *and* the determination to work through the problems, well, it's a story.

Which brings us to Utah's largest school district, the Jordan School District, with 83 schools in the southern end of the Salt Lake Valley. It takes a fleet of more than 500 vehicles, including 260 buses, serviced by a crew of 15 mechanics, to serve these 83 schools.

In 1992, Dr. Ron Sing, then the district's transportation director, convinced the school board to take a bold step: to buy an 84-passenger school bus equipped with a prototype Cummins 5.7-liter natural gas engine. According to Holly Evans, who drove that first bus, it worked well enough — as long as you were running empty on level ground. "But when we had a load of students on a hill, we were going 10 or 15 mph max."

Quite simply, the engine was too small for such a big bus. And there were other problems. For one, the pressure regulator used to freeze up as the gas moved from the pressurized storage tanks to the engine.

Nevertheless, the district persevered. "With a new product, you're going to have problems," says Willy Martinez, the district's shops supervisor. "You just have to have the right attitude."

In those early years, Martinez would consult regularly with Mountain Fuel (now Questar Gas) fleet specialists, who already had more than a decade of experience working on natural gas vehicles.

About two years later the district ordered three more natural gas buses. By then the manufacturer had addressed the freezing problem, but the buses were still underpowered.

The turning point came in May 2000 when the district took delivery on the first of several rear-engine buses

Continued on page 11

James Hinckle (left), director of transportation for the Jordan School District, and Willy Martinez, the district's shops supervisor, check out an engine in one of the natural gas-powered buses.

Questions and Answers

- Questions will be taken and answered following these presentations in a designated Q/A period.

- THANK YOU!